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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,485	10/20/2003	Stephen G. Dick	I-2-0137.2US	7905

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EXAMINER

JONES, PRENELL P

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/689,485

Applicant(s)

DICK ET AL.

Examiner

Prenell P. Jones

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/20/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is a data structure per se and is non-statutory under 35 USC 101.

Since claim 1 is claiming a packet structure, dependent claims 2-6 are rejected as well.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, Applicant is claiming "The data packet of claim 1 wherein the preamble and non-preamble error encoding gains," which is an incomplete claim. Therefore, it is not clear to Examiner as to exactly what Applicant is claiming.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akerberg (US Pat 6,483,826) in view of Olds et al (US Pat. 6,625,129).

Regarding claim 1, Akerberg (US Pat 6,483,826) discloses communicating packet data in a mobile telecommunication system that utilizes CDMA with processing gain with the use of combination of frequency channels, time-slots or channel codes (non-preamble), such as RACH, which are used to transport communication data, wherein the architecture of a frame and bit structure are displayed along with timeslots, whereby the preamble is at the beginning of the slot followed by combination of channels, time-slots or channel codes, destination and source info, (Abstract, Fig. 4A & 4B, col. 7, line 1 thru col. 8, line 67). Akerberg further discloses that it is desirable for different and varying processing gain implemented on different channel connections (non-preamble) so as not to interfere with already existing calls, and more/high processing gain provide for more calls on the same slot (col. 16, line 15 thru col. 17, line 33).

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However, Akerberg is silent on preamble portion containing a higher processing gain than remaining non-preamble portions of the frame/slot.

In a CDMA multiplexing wireless communication environment, Olds discloses high gain initially to operate or enable connection and thereafter lower gain to lower/minimize power consumption (col. 3, line 44-67, col. 5, line 43 thru col. 6, line 25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement

Regarding claim 5, Akerberg further discloses spreading factors from 1-32 being utilized with frame/packet structure, which includes a preamble and a combination of frequency channels, time-slots or channel codes, which are also associated with a spreading factor (col. 8, line 62 thru col. 9, line 25).

Regarding claim 6, Akerberg further discloses utilizing radio access common packet channels/RAPCH (col. 8, line 16-2).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akerberg (US Pat 6,483,826) in view of Olds et al (US Pat. 6,625,129) as applied to claim 1 above, and further in view of Schramm et al (US Pat 6,553,540).

Regarding claim 3, as indicated above, combined Akerberg and Olds discloses communicating packet data in a mobile telecommunication system that utilizes CDMA with processing gain with the use of combination of frequency channels, time-slots or channel codes (non-preamble), such as RACH, which are used to transport communication data, wherein the

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architecture of a frame and bit structure are displayed along with timeslots, whereby the preamble is at the beginning of the slot followed by combination of channels, time-slots or channel codes, destination and source info, that it is desirable for different and varying processing gain implemented on different channel connections (non-preamble) so as not to interfere with already existing calls, and more/high processing gain provide for more calls on the same slot, and high gain requested initially to operate or enable connection and thereafter lower gain to lower/minimize power consumption. However, both Akerberg and Olds are silent on first and second convolution encoding schemes.

In a wireless communication system, Schramm discloses utilizing convolution encoders, and a first and second convolution encoding scheme, whereby one encoding scheme results in a higher code rate/gain than the other symbols associated in the packet frame, RACH and associated blocks (Abstract, Fig. 8, col. 2, line 33-47, col. 4, line 22 thru col. 6, line 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement utilizing first and second convolution encoding schemes as taught by Schramm with the combined teachings of Akerberg and Olds for the purpose of avoiding generation of additional symbols to minimize interference in a mobile wireless system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

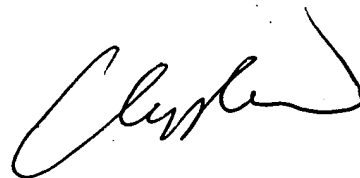
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

April 11, 2007

PJ



CHI PHAM
SUPERVISORY PATENT EXAMINER

4/16/07